



Sheet 1 of 6

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1075.1013-CC-D3	SERIAL NO. 091080, 909 Div. of 08/017, 292
LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>			APPLICANT George ISHIKAWA, et al.	
			FILING DATE May 19, 1998	GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
TD	AA	5,042,906	8/1991	Chesler et al.	385	123	
TD	AB	5,063,559	11/1991	Marcuse	398	91	
TD	AC	5,218,662	6/1993	Dugan	385	123	
TD	AD	5,224,183	6/1993	Dugan	385	24	
TD	AE	5,274,733	12/1993	Prigent, et al.	385	123	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
TD	AF	0 668 675 A2	08/23/95	EUROPE	602F	00100	X
	AG						
	AH						
	AI						
	AJ						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

TD	AK	Vengsarkar et al., "Dispersion Compensating Single-Mode Fibers: Efficient Designs For First- and Second-Order Compensation", OPTICS LETTERS, Vol. 18, No. 11, June 1, 1993, pp.924-926.
TD	AL	Antos et al., "Dispersion Compensating Fiber For Upgrading Existing 1310-nm-Optimized Systems to 1550-nm Operation", OFC/IOOC '93 Technical Digest, Feb. 1993, pp. 204-205.
TD	AM	Cimini et al., "Optical Equalization For High-Bit-Rate Fiber-Optic Communications", IEEE Photonics Technology Letters, Vol. 2, No. 3, March 1990, pp. 200-202.
TD	AN	European Search Report, EP 0668 675 A3; 7 February 1997.

EXAMINER

Jeandee Hughee

DATE CONSIDERED

Dec. 7, 2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1448 JUL 09 2004 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1075.1013-CC-D3	SERIAL NO. 09/080,909 Div. of 087917,292
LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>		APPLICANT George ISHIKAWA, et al.	
		FILING DATE May 19, 1998	GROUP UNASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
DR	AO	5,327,516	7/1994	Chraplyvy, et al.	359	124	
TV	AP	5,343,322	8/1994	Pirio, et al.	359	173	
DR	AQ	5,361,319	11/1994	Antos, et al.	385	123	
DR	AR	5,373,382	12/1994	Pirio, et al.	359	161	
TV	AS	5,386,314	1/1995	Jopson	359	326	

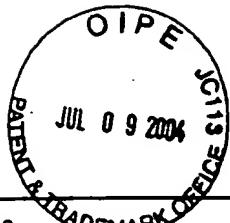
FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
	AT						
	AU						
	AV						
	AW						
	AX						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

DR	AY	Inoue et al. "Wavelength Conversion Experiment Usig Fiber Four-Wave Mixing", IEEE Photonics Technology Letters, Vol. 4, No. 1, Jan 1992, pp. 69-72.
DR	AZ	Hill et al, "CW Three-Wave Mixing in Single-Mode Optical Fibers", J. Appl. Phys. Vol. 49, No. 10, October 1978, p. 5098-5106.
DR	BA	Shibata et al., "Phase-Mismatch Dependence of Efficiency of Wave Mixing in a Single-Mode Optical Fiber", IEEE Journal of Quantum Electronics, Vol. QE-23, No. 7, July 1987, pp. 1205-1209.
EXAMINER		DATE CONSIDERED Dec. 7, 2004
<i>Deandra Hughes</i>		

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Sheet 3 of 6

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1075.1013-CC-D3	SERIAL NO. <u>09/080,909</u> Div. of 08/017,292
LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>			APPLICANT George ISHIKAWA, et al.	
			FILING DATE May 19, 1998	GROUP UNASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
✓	BB	5,392,377	2/1995	Auracher	385	24	
✓	BC	5,410,624	4/1995	Morkel	385	24	
✓	BD	5,546,210	8/1996	Chraplyvy et al.	359	124	
	BE						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
	BF						
	BG						
	BH						
	BI						
	BJ						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

✓	BK	Hamaide et al., "Limitations in Long Haul IM/DD Optical Fiber Systems Caused by Chromatic Dispersion and Non-Linear Kerr Effect," Electronics Letters, Vol. 26, No. 18, Aug 30, 1990, pp. 1451-1453.
✓	BL	Maeda et al., "The Effect of Four-Wave Mixing in Fibers on Optical Frequency-Division Multiplexed Systems, IEEE Journal of Lightwave Technology, Vol. 8, No. 9, Sept 1990, pp. 1402-1408.
✓	BM	Schadt et al., "Numerical Investigation of Signal Degradation Due to Four-Wave Mixing in a 21-Channel 2.5 Gb/s Coherent Heterodyne DPSK System, IEEE Jnl of Lightwave Tech. Vol. 9, No. 9, Sept 1991.

EXAMINER Leandra Hughes DATE CONSIDERED DEC. 7, 2004

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Sheet 4 of 6

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
1075.1013-CC-D3

SERIAL NO. 09/080,909
Div. of 08/917,292

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT

George ISHIKAWA, et al.

FILING DATE

May 19, 1998

GROUP

UNASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	BN						
	BO						
	BP						
	BQ						
	BR						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
	BS						
	BT						
	BU						
	BV						
	BW						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>[Signature]</i>	BX	Inoue, "Four-Wave Mixing in an Optical Fiber in the Zero-Dispersion Wavelength Region, IEEE Journal of Lightwave Technology, Vol. 10, No. 11, Nov 1992, pp. 1553-1561
<i>[Signature]</i>	BY	Inoue, "Phase-Mismatching Characteristic of Four-Wave Mixing in Fiber Lines with Multistage Optical Amplifiers", Optics Letters, Vol. 17, No. 11, June 1, 1992, pp. 801-803.
<i>[Signature]</i>	BZ	Forghieri et al., "Reduction of Four-Wave-Mixing Cross Talk in WDM Systems Using Unequally Spaced Channels", OFC/IOOC '93 Technical Digest, Feb 1993, p. 252.

EXAMINER

Leander Hayes

DATE CONSIDERED Dec. 7, 2004

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Sheet 5 of 6

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.
1075.1013-CC-D3

SERIAL NO. 09/080,909
Div. of 08/017,292

APPLICANT

George ISHIKAWA, et al.

FILING DATE

May 19, 1998

GROUP

UNASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	CA						
	CB						
	CC						
	CD						
	CE						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
	CF						
	CG						
	CH						
	CI						
	CJ						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	CK	Aoyama et al., "Design and Operation of Transmission Lines Containing ER-Doped Fiber Amplifier Repeaters, IEEE Globecom '92, 1992, pp. 1875-1879.
	CL	A. Chraplyvy, "Limitations in Long-Haul Transmission Systems", OFC/IOOC '93 Technical Digest, Feb 1993, p. 249.
	CM	Kurtzke et.al., "Impact of Fiber Four-photon Mixing on the Design of n-channel Megameter Optical Communication Systems", OFC/IOOC '93 Technical Digest, Feb 1993, p. 251.
EXAMINER		DATE CONSIDERED <u>Dec 7, 2004</u>

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Sheet 6 of 6

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1075.1013-CC-D3	SERIAL NO. 09/080,909 Div. of 08/017,282
LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>			APPLICANT George ISHIKAWA, et al.	
			FILING DATE May 19, 1998	GROUP UNASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	CN						
	CO						
	CP						
	CQ						
	CR						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
	CS						
	CT						
	CU						
	CV						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	CW	"Frequency Allocation for Terrestrial Line Systems Using WDM and OFA's", ITU Telecommunication Standardization Sector, Com. 15-235-D, May 1994
	CX	"Draft Recommendation G.mcs: Optical Interfaces For Multichannel Systems with Optical Amplifiers", ITU Telecommunication Standardization Sector, Com. 15-282-E, Study Group 15 - Contribution 282; March 1996.
	CY	"Report Of Study Group 15 - Recommendations to be Submitted to the Rules of Resolution 1 (Section 8) at the Next Meeting of Study Group 15", ITU Telecommunication Standardization Sector, Com. 15-R 3-E, May 1997.
	CZ	M. Aiki, "Limitations in long-haul optical-amplifier transmission systems", OFC/IOOC '93 Technical Digest, Feb. 1993, pp. 250.

EXAMINER Deandra Hughes DATE CONSIDERED Dec. 7, 2004

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Sheet 1 of 1

APPLICATION NO.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NO. 1075.1013C2D3	APPLICATION NO. 09/080,909
LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>		FIRST NAMED INVENTOR George ISHIKAWA, et al.	
		FILING DATE May 19, 1998	GROUP ART UNIT 3663

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
AA						
AB						
AC						
AD						
AE						
AF						

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
AG	4-248504	9/4/92	Japan	602B	6100	Abstract and full translation
AH						
AI						
AJ						
AK						
AL						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

TRANSLATION YES NO

AM		
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EXAMINER <i>Deonica Hughes</i>	DATE CONSIDERED <i>Dec. 7, 2004</i>
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